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September 1940

Accidents.

Farm accident problem. Agricultural engineering. v. 21, no. 8.
August, 1940. p. 316. Includes: (1) deaths and injuries
which occur in farm work; (2) those which occur in farm homes;
(3) those which take place in going about highways and streets;
(4) those occurring in recreational and other public pursuits.

Agriculture.

Agricultural production and types of farming in Minnesota. Selmer
A. Eugene and George A. Pond. (St. Paul) 1940. 70p.
Minnesota. Agricultural experiment station. Bulletin 347.

Agricultural production and types of farming in Minnesota. Statist-
ical supplement. Selmer A. Eugene and George A. Pond. St. Paul.
1940. 25 p. Minnesota. Agricultural experiment station.
Bulletin 347 Supplement.

Annual report: Research and investigational activities for the
fiscal year ending June 30, 1940. The College of agriculture,
the University of Georgia. Edited by Frank B. Lanham.
Athens, Ga. 1940. 74 p. Georgia. University. Bulletin.
v. 40, no. 8a. June 1940.

Changing agriculture. Technocrat. v. 8, no. 1. January, 1940.
p. 15.

The dust bowl: Agricultural problems and solutions.... Washington,
1940. 47 p. U.S. Dept. of agriculture. Office of land use
coordination. Editorial reference series: no. 7, mimeographed.

Fiftieth annual report for the year ending June 20, 1939. University
of Arizona. College of agriculture. Agricultural experiment
station. Tucson, Ariz, 1940. 102 p.

Fifty-second annual report, Rhode Island State college, Agricultural
experiment station, Kingston, R.I. Kingston, 1940. Rhode
Island. Agricultural experiment station. Contribution 574.

Forty-ninth annual report, January 1 to December 31, 1938 of the Agricultural experiment station of the Alabama polytechnic institute, Auburn. Auburn, Ala. n.d. 29 p.

Forty-sixth annual report, Agricultural experiment station, University of Minnesota, July 1, 1938 to June 30, 1939. St. Paul. n.d. 100 p.

Maryland farm handbook 1940; State and federal agricultural services. United States Dept. of agriculture. Washington, 1940. 59 p.

Planning for the farmer, a short reading list of free and inexpensive material, compiled in the library, Bureau of agricultural economics. Washington, 1940. 4 p. U.S. Bureau of Agricultural economics. Economic library list no. 12. Mimeographed.

Seventh annual report of the Farm credit administration. Washington, 1940. 260 p.

Silver anniversary report, Florida Agricultural extension service, 1939. Report of general activities for 1939 with financial statement for the fiscal year ended June 30, 1939. Agricultural extension service. College of agriculture, University of Florida. n.p., n.d. 99 p.

Twenty-five years of extension work in Missouri, with the annual report for 1939, Agricultural extension service, College of agriculture, University of Missouri. Columbia, Mo., 1940. 157 p. Missouri. University. College of agriculture. Agricultural extension service. Circular 420.

What's new in farm science, part II: (pt. 2 of 44th, 1936/37) Annual report of the director, Agricultural experiment station, University of Wisconsin, Madison. Madison, 1938. 94 p. Wisconsin. Agricultural experiment station, Bulletin 440.

Air Conditioning.

Applications of gas to air conditioning. By George E. May. Heating, piping and air conditioning. v. 12, no. 6. June, 1940. p. 395-398. Briefly describes various systems in which gas is used for air conditioning and points out some of more interesting characteristics of each. These systems classified according to functions and described in groups.

Code of application engineering standards for air conditioning for comfort; recommended practice for members of Air conditioning & refrigerating machinery association. Washington, 1940. 22 p.

Batteries.

10 sure ways to ruin a battery. By C.E. Packer. Implement and tractor. v. 55, no. 16. August 3, 1940. p. 16-17, 23. Abuse, and not hard use is the cause of most battery failure-- proper care will lengthen battery life and efficiency.

Building Construction.

Building construction 1921 to 1938. Prepared by Division of construction and public employment. Washington, 1940. 114 p. U.S. Bureau of labor statistics. Bulletin no. 668.

Nomograms for the design of reinforced concrete beams. By W.G. Sutton and J.R. Kerrich. Structural engineer. v. 18, no. 5. May, 1940. p. 597-603. Article deals with design and construction of nomograms for all three types of beam. Its main purpose is to present ready means of determining numerical values of related quantities in relevant formulae and so facilitate process of designing or checking of design.

Building Materials.

Hardwood interior trim and molding... A recorded standard of the industry. Washington, 1939. 12 p. U.S. National bureau of standards. Commercial standard CS76-39.

Structural clay products, by J. Joseph W. Palmer... Washington, 1939. 19 p. U.S. Bureau of foreign and domestic commerce. Trade information bulletin no. 842.

Corrosion.

Institution research committee: Committee on soil-corrosion of metals and cement products. Journal of the institution of civil engineers. v. 14, no. 7. June, 1940. p. 392-398.

Cold Storage.

Building and operating a cold storage plant at the orchard. F. H. Wissler. Maryland agricultural society. Report. v. 24, 1939. p. 139-141.

The cold storage of eggs and poultry. By Thomas W. Heitz... Washington, 1940. 51 p. Dept. of agriculture. Circular no. 73, slightly rev. June 1940.

Conservation.

Compilation of Soil conservation and domestic allotment act, as amended, Agricultural adjustment act of 1938, as amended, Federal crop insurance act, as amended, Sugar act of 1937, appropriation items relating thereto and miscellaneous laws as of the close of the second session of the seventy-sixth Congress, November 3, 1939. U.S. Dept. of agriculture. Agricultural adjustment administration. Washington, 1940. 106 p.

The experimental agricultural conservation program in Licking County, Ohio; a study of the results in 1939. F.L. Morison. Columbus, Ohio, 1940. 23p. Ohio. State university. Dept. of rural economics. Mimeographed bulletin no. 129.

Water conservation. In Missouri. University. College of agriculture. Agricultural extension service. Annual report, 1939. p. 89-90.

Cotton.

Cottonseed research acquires national significance. An address by Dr. Henry G. Knight. Delivered at the annual meeting of the National cottonseed products association, New Orleans, La., May 8, 1939. Washington, 1939. 14 p. Mimeographed.

Crushing cottonseed cooperatively, by John S. Burgess, jr. Farm credit administration, Cooperative research and service division. Washington, 1939. 27 p. U.S. Farm credit administration. Circular no. C-114.

Sources of heat for cotton drying. By Charles A. Bennett.... Victor L. Stedronsky...and William J. Martin... Washington, 1940. 22 p. U.S. Dept. of agriculture. Miscellaneous publication no. 385.

The technology of the cottonseed crushing industry, by K.S. Markley and D.F.J. Lynch, Southern regional research laboratory, Bureau of agricultural chemistry and engineering. 23 p. Mimeographed.

Cotton Gins and Ginning.

Cotton ginning in the Yazoo-Mississippi delta during the 1939 season, by Francis L. Gerdes... 2 p. Reprint from the February 21, 1940 issue of the Delta council News, Stoneville, Mississippi. Mimeographed.

Cotton-quality improvement with particular reference to ginning, by Francis L. Gerdes... and Charles A. Bennett.... 7 p. mimeographed. U.S. Agricultural marketing service and Bureau of agricultural

Cotton Gins and Ginning. (Cont'd)

chemistry and engineering. no. 3127. Mimeographed. (Presented by the senior author before a meeting of the Alabama cotton ginner's association, Birmingham, Ala., May 22, 1940.)

Development of cooperative cotton ginning, by Omer W. Herrmann. Farm credit administration, Cooperative research and service division. Washington, 1939. 68 p. U.S. Farm credit administration. Circular C-112.

Essentials of good ginning, by Francis L. Gerdes and Charles A. Bennett. 5 p. U.S. Dept. of agriculture. Agricultural marketing service and Bureau of agricultural chemistry and engineering. no. 3137. (Presented by the senior author before a meeting of the Tennessee cotton ginner's association, Jackson, Tenn. May 30, 1940.) Mimeographed.

Ginning and packaging practices in relation to quality and value of cotton. By Francis L. Gerdes. Address, Cotton research congress, Waco, Tex., June 28, 1940. 12 p. U.S. Agricultural marketing service. Mimeographed.

Growers and ginner's warned against saw ginning of Sea Island cotton. U.S. Dept. of agriculture, Agricultural marketing service and Bureau of agricultural chemistry and engineering. Stoneville, Miss. 1940. 2 p. mimeographed.

Organizing a cooperative cotton gin, by Otis T. Weaver and U.H. Prickett. Farm credit administration, Washington, D.C. Cooperative research and service division. Washington, 1939. 66 p. U.S. Farm credit administration. Circular no. C-109.

Preliminary report on 1939 - 1940 developments at the U.S. Cotton Ginning laboratory, by Charles A. Bennett and Francis L. Gerdes. 5 p. U.S. Bureau of agricultural chemistry and engineering. no. 3119. (Presented by the senior author before a meeting of the Oklahoma cotton ginner's association, April 25, 1940.) Mimeographed.

Research developments at the U.S. cotton ginning laboratory, by Chas. A. Bennett and Francis L. Gerdes. 5 p. U.S. Bureau of agricultural chemistry and engineering. ACE-50. Mimeographed. (Presented by the senior author before a meeting of the Georgia cotton ginner's assn., May 9, 1940.)

Crops (Drying)

Investigation of barn hay drying system as applied to Georgia conditions. W.E. Hudson, Frank B. Lanham...In Georgia. University. College of agriculture. Annual report: Research and investigational activities for the fiscal year ending June 30, 1940. p. 15-21.

Dairying.

The dairy industry in the United States: Selected references on the economic aspects of the industry. Compiled by Louise O. Bercaw. Washington, 1940. 59 p. U.S. Bureau of agricultural economics. Economic library list no. 11. Mimeographed.

Diesel Engines.

American diesel engines, by Lacey H. Morrison. 2d ed. New York and London. McGraw-Hill book company, inc., 1939. 489 p.

Electricity, Distribution

Construction contract (general contract) for rural electrical distribution project. Washington, 1939. 172 p. For a project financed under the Rural electrification act of 1936 as amended by the Rural electrification act of 1938.

The cost of distributing power: Knoxville, Tenn., a report on the first year of operation with TVA rates. U.S. Tennessee valley authority. Knoxville, Tenn., n.d. 6 p.

Electricity in the Home.

Electric clothes dryer. By Chas. Wildebour and Glen Cushing. Rural electrification exchange. v. 3, no. 3. (New series.) Third quarter, 1940. p. 62. Drawings of electric clothes dryer. Developed by Agricultural Engineering Dept., Puget Sound Power & Light Co.

Electricity on the Farm.

New hopes for rural electrification. Address given by J.A. Krug before the annual meeting of the Middle Tennessee farmers institute Columbia, Tenn., May 17, 1940. Tennessee valley authority. Knoxville, Tenn. 1940. 13 p. mimeographed.

1939 report on Rural electrification administration. Washington, 1940. 354 p.

Rural electrification. In Missouri. University. College of agriculture. Agricultural extension service. Annual report. 1939. p.86-88.

Engines.

Gas engine handbook, by C. Remschel. Gas engine power committee. Industrial gas section, American gas association. New York, n.d. 56 p.

Erosion.

Review and discussion of literature pertinent to crop rotations for erodible soils. C.R. Enlow. Washington, 1939. 50 p. U.S. Dept. of agriculture. Circular no. 559.

Soil erosion control. In Missouri. University. College of agriculture. Agricultural extension service. Annual report. 1939. p. 83-84.

Use the land and save the soil. U.S. Dept. of agriculture, Soil conservation service, Upper Mississippi region. Washington, 1940. 14 p.

Farm Buildings.

Construction of farm buildings. In Missouri. University. College of agriculture. Agricultural extension service. Annual report. 1939. p. 88-89.

Plans of farm buildings for southern States, compiled by the Bureau of agricultural chemistry and engineering and the Extension service, U.S. Dept. of agriculture, in cooperation with the agricultural engineering departments and the cooperative extension services in agriculture and home economics at the following colleges and universities: Alabama polytechnic institute... etc. Washington, 1940. 123 p. U.S. Dept. of agriculture. Miscellaneous publication no. 360.

Farm Income.

Estimated gross cash income from the sale of agricultural products from the farm, and from Agricultural adjustment administration payments for Ohio farms, by counties - 1939, by P.P. Wallrabenstein and J.I. Falconer. Columbus, Ohio, 1940. 11, no. 1. Ohio. State university. Dept. of rural economics. Mimeographed bulletin no. 130.

Farm Labor.

Land tenure in Arkansas. II. Change in labor organization on cotton farms. J.G. McNeely and Glen T. Barton. Fayetteville, Ark., 1940. 26 p. Arkansas. Agricultural experiment station. Bulletin no. 397.

Farm Machinery and Equipment.

Better use of farm machinery. In Missouri. University. College of agriculture. Agricultural extension service. Annual report. 1939. p. 90. Estimated savings resulting from assistance of county agents to farmers with machinery problems amounted to more than \$100,000.

The cost of using farm machines. A.J. Schwantes. St. Paul, 1940. 1 p. Minnesota. University. Dept. of agriculture. Agricultural extension division. Agricultural engineering news letter no. 100. July 15, 1940.

Farm Machinery and Equipment. (Cont'd)

Dynamic properties of soils as applied to the elements of implement design. Development of reduced-friction surfaces and materials for experimental plows. (F.A. Kummer.) In Alabama. Agricultural experiment station. Annual report. 49th, 1938. p. 7-8.

Investigation of a low cost threshing machine. By F.W. Peikert and S.T. Moore. In Georgia. University. College of agriculture. Annual report: Research and investigational activities for the fiscal year ending June 30, 1940. p. 5-9.

Labor saving machinery. By E.R. Theriot and E.A. Maier. Sugar bulletin. v. 18, no. 20. July 15, 1940. p. 2-3. Purpose of this paper is to discuss use of machinery to take off dirt in early spring.

New grass silage and haymaking machinery to be demonstrated at Madison. By F.W. Duffee. Farm implement news. v. 61, no. 13. June 27, 1940. p. 19.

Remodeling used machinery for tractor farming: Two-binder hitch and windrower. By L.F. Larsen Agricultural engineering dept., Agricultural experiment station, South Dakota State college, Brookings, S.Dak. Brookings, 1940. South Dakota. Agricultural experiment station. Circular no. 30.

10,000 attend grass harvester showing. Implement and tractor. v. 55, no. 16. August 3, 1940. p. 13, 27. Two manufacturers demonstrate new equipment and hay harvesting methods at Madison, Wis.

What the industry's statistics reveal. Implement and tractor. v. 55, no. 14. July 6, 1940. p. 20-32, 56-63, 76. Index of statistical data: Agricultural machinery imports; percentages of sales by classes and products; binders (grain); combines--distribution by States; sales in U.S.; corn-harvesting equipment, shellers; crushers--feed; cultivators; dairy equipment; dealers (farm equipment); drills; engines--internal combustion farm; electrical service; farm--acreage (major crops harvested), acreage (production major crops); by States, 1939, number in U.S., value of farm equipment in U.S., wholesale sales of farm equipment in U.S., tractors, including parts, other farm equipment and percentage of tractors to total sales; grinders, feed; harrows; haying machinery; hay presses; horses and mules, including colts; husker shredders; income, by States, 1939; international trade, farm machinery, farm products; land rollers; lighting plants; listers; planters--corn and cotton; plows, tractor-drawn disk, horse-drawn moldboard; potato machinery, pulverizers; rims; shellers (corn); shredders (husker); silage cutters; sprayers (power); spreaders; stanchions; threshers (grain); tractors, sales in U.S. by types and sizes; percentages of various types and sizes sold in U.S., number in U.S. by counties and States, manufactured and total

Farm Machinery and Equipment. (Cont'd)

sales; vehicles (horse-drawn); water systems; wheel equipment on tractors; windmills.

Farmhouses.

Work and interests of the Bureau of agricultural chemistry and engineering in rural housing. A paper prepared by Wallace Ashby, for the Rural housing get-together of the Central housing committee on rural housing, August 5, 1940. Washington, 1940. 3 p. mimeographed.

Fats and Oils.

Animal and vegetable fats and oils -- production, consumption, imports, exports and stocks. Quarterly for calendar years 1935 to 1939. Prepared under the supervision of Harvey J. Zimmerman. U.S. Dept. of commerce, Bureau of the census. Washington, 1940. 29 p.

Castor beans and castor oil; production and utilization, 1918-1940. 4 p. typed (carbon copy) bibliography by CAP, 7/13/40.

Feed Mixing.

Cone type feed mixer. By Ivan Branton. Rural electrification exchange. v. 3, no. 3. (New series.) Third quarter. 1940. p. 66.

Fertilizer Placement.

Methods of applying fertilizer: Recommendations of the National joint committee on fertilizer application April 1938. Washington. The National fertilizer association. n.d. 15 p.

Floors.

Structural properties of "Tilecrete type A" floor construction sponsored by the Tilecrete co., by Herbert L. Whittemore, Ambrose H. Stang, and Douglas E. Parsons. Washington, 1940. 11 p. U.S. National bureau of standards. Building materials and structures, report BMS51.

Fruits and Vegetables.

Foreign import duties and regulations on fresh fruits and vegetables, by Roberta P. Wakefield. Prepared under the direction of Henry Chalmers, chief, Division of foreign tariffs. Washington, 1940. 130 p. U.S. Bureau of foreign and domestic commerce. Trade promotion series no. 206.

Fuels.

Coke and byproducts. By M. van Siclen, M.M. Otero, and M.F. Cooke. Washington, 1940. 56 p. U.S. Bureau of mines. Minerals year-book 1940, review of 1939. Chapter (preprint.).

Fuel oils (fifth edition). A recorded standard of the industry. Washington, 1940. 18 p. U.S. National bureau of standards. Commercial standard CS12-40. Supersedes CS12-38.

Hay Handling.

Hay baling in the field. Agricultural engineering record. June, 1940. p. 8-20. Process has advantages: that it allows tractor or car sweeps, cheapest method of collection, to be used in fields where it is not convenient to build stacks; that there is little or no waste of kind which normally occurs at outside of a stack; and that storage space per ton of hay is smaller. Bales are convenient and economical to handle for feeding purposes and command higher price if hay is to be sold.

Heating.

Automatic mechanical draft oil burners designed for domestic installation. A recorded standard of the industry. Washington, 1939. 21 p. U.S. National bureau of standards. Commercial standard CS75-39.

A graphical solution of heating problems, by R.M. Johnston. Blacksburg, Va., 1940. 42 p. Virginia. Polytechnic Institute. Bulletin. v. 33, no. 12. July, 1940. Engineering experiment station series no. 45.

Heating the homemade brooding unit with electricity. J.B. Greiner. In Georgia. University. College of agriculture. Annual report: Research and investigational activities for the year ending June 30, 1940. p. 11-14.

Radiant heating and cooling: What it is and how it is figured. By F.E. Giesecke. Heating, piping and air conditioning. v. 12, no. 6. June, 1940. p. 357-361.

Radiator capacities in terms of heating loads, by John Lewis Dilworth. In Virginia. Polytechnic institute. Bulletin v. 33, no. 12. July, 1940. (Engineering experiment station series no. 45.) p. 43-45.

Houses.

Annual report of the United States Housing authority for the fiscal year 1939. Washington, 1940. 59 p.

Houses. (Cont'd)

Introduction to housing facts and principles. By Edith Elmer Wood.
Federal works agency, United States housing authority. Washington,
1939. 161 p.

Seventh annual report, Federal home loan bank board... for the period
July 1, 1938 through June 30, 1939. Washington, n.d. 242 p.

\$2,500 home for eight. Popular Mechanics. v. 74, no. 3.
September 1940. p. 328-331, 131A-132A.

Hydrology.

Hydrologic studies: Compilation of rainfall and run-off from the
watersheds of the Red Plains conservation experiment station, Guthrie,
Okla., 1931-38. Washington, 1940. 30 p. U.S. Soil conserva-
tion service. SCS-TP-32. June, 1940. mimeographed.

Hydrology of Virginia. Part II. Flood studies; storms that have caused
great floods; great rainfalls, by P.H. McGauthey and H.B. Snyder, jr.
Blacksburg, Va., 1940. 94 p. Virginia. Polytechnic institute.
Bulletin. v. 33, no. 10. May, 1940. Engineering experi-
ment station series no. 44.

Irrigation.

Economical irrigation. T.H. McHatton and R.T. Holmes. In Georgia.
University. College of agriculture. Annual report: Research
and investigational activities for the fiscal year ending June 30,
1940. p. 28-29.

Orchard irrigation. By Samuel Fortier. Washington, 1940. 27 p.
U.S. Dept. of agriculture. Farmers' bulletin no. 1518, slightly
revised June 1940. This bulletin is a revision of and supersedes
Farmers' bulletin 882, entitled, "Irrigation of orchards."

Problems of irrigation engineering. By Radha Krishna Khanna. Indian
engineering. v. 107, no. 4. April, 1940. p. 101-102. Silt
theory. Empirical formulae. Channel dimensions. Silt transport.
Water flow. Steep slopes. Flat slopes. Artificial channels.
Working head. Hydraulic research.

Land Clearing.

Clearing land with the bulldozer. A.J. Schwantes and M.J. Thompson.
St. Paul, 1940. 8 p. Minnesota. University. Agricultural
extension service. Extension bulletin 212.

Land Utilization.

Digest of outstanding Federal and State legislation affecting rural land use. Washington, 1940. 27 p. U.S. Bureau of agricultural economics. Land economics division. Bulletin 56: Mimeographed.

Land use planning under way. Prepared by the Bureau of agricultural economics in cooperation with the Extension service, Farm security administration, Soil conservation service, Agricultural adjustment administration, and Forest service, United States Dept. of agriculture. Washington, 1940. 48 p.

Public land acquisition in a national land-use program. Part I, rural lands. Report of the Land committee to the National resources planning board. Washington, 1940. 25 p.

Lighting.

Electric light for the farmstead. Prepared by the Bureaus of agricultural chemistry and engineering and Home economics. Washington, 1940. 60 p. U.S. Dept. of agriculture. Farmers' bulletin no. 1838.

Milk Coolers.

Cooling milk at the farm with special reference to modern electric milk coolers. By John E. Nicholas. Milk plant monthly. v. 29, no. 7. July, 1940. p. 23-27.

Milk Houses.

A milkhouse for the wholesale producer, by M.G. Huber. Orono, 1940. 12 p. Maine. University. College of agriculture. Extension service. Maine extension bulletin 276.

Miscellaneous.

Put it in writing. By John K. Crippen. Forbes. v. 45, no. 11. June 1, 1940. p. 33. Simple rules which make reports worthwhile includes: 1. Report is a statement of facts. 2. Report must be orderly. 3. Be authoritative. 4. Adopt the "you" attitude. 5. Don't be a "weaver." 6. Don't editorialize. 7. Build up to a climax. 8. Never write a purposeless report. 9. Plan your report carefully. 10. Don't use long-winded sentences. 11. Make your report easy to read. 12. Use charts and graphs where needed. Good reports--like good books--are never written. They are re-written.

Motors.

A study of food-mixer motor performance, by C.S. Siskind, Lafayette, Ind., 1940 37 p. Purdue University. Engineering bulletin. v. 24, no. 2a. April 1940. (Engineering experiment station. Research series no. 72.)

Paints and Painting.

Paints and plasters for rammed earth walls. Ralph L. Patty.
Brookings, S.D., 1940. 39 p. South Dakota. Agricultural
experiment station. Brookings. Bulletin 336.

Pest Control.

Equipment for burning sulfur in empty greenhouses and in mushroom
houses for the destruction of mites and insects. Orve K. Hedden
and C.R. Neiswander. In Ohio. Agricultural experiment station,
Wooster. The bimonthly bulletin. v. 25, no. 204. May-June, 1940.
p. 63-72.

Poultry Houses and Equipment.

A summer shelter for pullets, by C.W. Carrick and I.D. Mayer.
Lafayette, Ind., 1940. 4 p. Purdue university. Cooperative
extension work in agriculture and home economics. Leaflet no. 196.
(2d reprint.)

Power.

Power from small streams. C.A. Crowley. Popular Mechanics. v. 74,
no. 3. September, 1940. p. 466-471. Estimating power demand,
measuring capacity of the stream, determining "head" of water,
turbine size, and building a dam.

Thirty-second annual report of the Hydro-electric power commission of
Ontario for the year ending October 31, 1939. Toronto, 1940. 394 p.

Pumps and Pumping.

Pump jacks. A.G. Tyler. St. Paul, 1940. 1 p. Minnesota.
University. Dept. of agriculture. Agricultural extension division.
Agricultural engineering news letter no. 101.

Rainfall and Run-off.

Influences of vegetation and watershed treatments on run-off, silting,
and stream flow: A progress report of research prepared by the
Forest service and the Soil conservation service. Washington, D.C.
1940. 80 p. U.S. Dept. of agriculture. Miscellaneous publication
no. 397.

Refrigerator Lockers.

Freezing and storage of foods in freezing cabinets and locker plants.
D.K. Tressler and C.W. DuBois. Geneva, N.Y., 1940. 60 p.
New York. State agricultural experiment station, Geneva.
Bulletin no. 690.

Refrigerator Lockers. (Cont'd)

Refrigerated locker storage, a modern method of food preservation-- a summary of practices being used by experienced locker plant operators in storing meats, fruits, and vegetables. By P.B. Redeker. Detroit, Business news publishing co., 1939. 112 p. The refrigeration library. Manual no. LS-1.

Resources.

Our national resources, facts and problems. National resources planning board. Washington, 1940. 45 p.

Progress report - 1939 of the National resources committee. Washington, 1940. 173 p. U.S. 76th Congress, 3d session. House of representatives. Document no. 561. Also issued in 1939 by the National resources planning board (which succeeded to the powers of the Committee) with title: Progress report, 1939; statement of the Advisory committee, National resources committee.

Regional planning. Part IX - The northern great plains: A progress report, September 1939. National resources planning board. Washington, 1940. 14 p.

Septic Tanks.

Septic tanks and sewage disposal, by A.G. Tyler. St. Paul, 1940. 12 p. Minnesota. University. Agricultural extension service. Extension bulletin 208.

Sewage Irrigation.

Sewage irrigation as practiced in the western states. By Wells A. Hutchins. Washington, 1939. 60 p. U.S. Dept. of agriculture. Technical bulletin no. 675.

Silage.

Relative cost of hay-crop silage and corn silage. F.L. Morison. In Ohio. Agricultural experiment station, Wooster. The bimonthly bulletin. v. 25, no. 205. July-August, 1940. p. 122-123.

Silt.

Some principles of accelerated stream and valley sedimentation. By Stafford C. Happ. Gordon Rittenhouse, and G.C. Dobson. Washington, 1940. 133 p. U.S. Dept. of agriculture. Technical bulletin no. 695.

Silt. (Cont'd)

Transportation of soil in irrigation furrows. By Colin A. Taylor. Agricultural engineering. v. 21, no. 8. August, 1940. p. 307-309. Paper assembles available information on transportation velocities and discusses soil movement factor in relation to design of furrow shapes and choice of grades in irrigation developments.

Soil Moisture.

Soil moisture, root distribution and aeration as factors in nut production in western Oregon. C.E. Schuster and R.E. Stephenson. Corvallis, Ore., 1940. 32 p. Oregon. Agricultural experiment station, Corvallis. Station bulletin 372.

Soils.

Relative infiltration and related physical characteristics of certain soils, by G.R. Free, G.M. Browning, and G.W. Musgrave. Washington, 1940. 52 p. U.S. Dept. of agriculture. Technical bulletin no. 729.

Selected bibliography on soil mechanics. Prepared by the Committee of the Soil mechanics and foundations division on soil mechanics bibliography; adopted December 4, 1939. New York, 1940. 58 p. American society of civil engineers. Manuals of engineering practice no. 18.

Sprays and Spraying Equipment.

Operating costs of portable sprayers. C.W. Ellenwood. In Ohio. Agricultural experiment station, Wooster. The Bimonthly bulletin. v. 25, no. 204. May-June, 1940. p. 85-88.

Standardization.

Proposed American standards: Transformers, regulators, and reactors; proposed American recommended practices: Text code for transformers, regulators, and reactors; guides for operation of transformers. Not approved: Published for trial and criticism. March, 1940. 97 p. Sponsor: Electrical standards committee. New York, American standards association, 1940. American engineering and industrial standards.

Storage of Farm Produce.

Better storage for farm manure. By Leonard Hegnauer and Otto J. Hill. Pullman, 1940. 11 p. Washington. State College. Extension service. Extension bulletin 253.

Storage of Farm Produce. (Cont'd)

Corn storage in the ever-normal granary, converting surpluses into reserves by storing corn in years of large crops for use in years when crops are small. Washington, 1938. 28 p. U.S. Agricultural adjustment administration. Commodity information series. 38-Corn-2.

Farm storage and marketing of rough rice in Arkansas. Orville J. Hall. Fayetteville, Ark., 1940. 23 p. Arkansas. Agricultural experiment station, Fayetteville. Bulletin 395.

Stream Pollution.

Aspects of governmental policy on stream pollution abatement. By Herman G. Baity. American journal of public health. v. 29, no. 12. December, 1939. p. 1297-1307.

Surveying.

First and second order triangulation and traverse in North Carolina (1927 datum), volume II. By Oscar S. Adams. Washington, 1940. 205 p. U.S. Coast and geodetic survey. Special publication no. 218.

Spirit leveling in South Carolina. Part 2. Southern South Carolina, 1896-1938. J.G. Staack. Washington, 1940. U.S. Geological survey. Bulletin 890-B. (i.e., bulletin 890, p. 457-766.)

Textile Fibers.

Annual rayon statistical survey. Rayon Organon. v.11, no. 2. January 23, 1940. p. 15a - 28.

Flax-fiber production. By B.B. Robinson. Washington, 1940. 28p. U.S. Dept. of agriculture. Farmers' bulletin no. 1728, revised July 1940. This bulletin is a revision of and superseder Farmers' bulletin 669, Fiber flax.

Tires.

The effect of tire wear on tractor wheel slippage. F.W. Peikert. In Georgia. University. College of agriculture. Annual report: Research and investigational activities for the fiscal year ending June 30, 1940. p. 22-27.

Rubber's potential for retailers in upward trend. Implement and tractor. v. 55, no. 16. August 3, 1940. p. 10-11, 36.

Walls.

Structural properties of a masonry wall construction of "Munlock dry wall brick" sponsored by the Munlock engineering co., by Herbert L. Whittmore, Ambrose H. Stang, and Douglas E. Parsons. Washington, 1940. 12 p. U.S. National bureau of standards. Building materials and structures, report BMS53.

Structural properties of prefabricated wood-frame construction for walls, partitions, and floors sponsored by American houses, inc., by Herbert L. Whittmore and Ambrose H. Stang, with the collaboration of Thomas R.C. Wilson. Washington, 1940. 26 p. Building materials and structures, report BMS47.

Water, Underground

Ground water studies. In Fiftieth annual report. Arizona. Agricultural experiment station. Tucson, Ariz., 1940. p. 42-46.

Water Supply.

Snow utilization in prairie agriculture, by G.D. Matthews. Ottawa, 1940. 21 p. Canada. Dept. of agriculture. Farmers' Bulletin 95. (Publication 696.)

Stock-water developments: Wells, springs, and ponds, by C.L. Hamilton, and Hans G. Jepson. Washington, 1940. 70 p. U.S. Dept. of agriculture. Farmers' bulletin no. 1859.

Weeds.

Russian knapweed and perennial peppergrass. By E.A. Helgeson. Fargo, N.Dak., 1940. 26 p. North Dakota. Agricultural experiment station. Bulletin 292.

Twenty noxious weeds of Indiana. Oliver C. Lee. Lafayette, Ind., 1940. 24 p. Purdue university. Cooperative extension work in agriculture and home economics. Extension bulletin no. 246.

Weed eradication and control. In Fiftieth annual report. Arizona. Agricultural experiment station. Tucson, Ariz., 1940. p. 53-55.

Weed problem of the Upper Peninsula. By B.R. Churchill. East Lansing, Mich., 1940. Michigan state college. Agricultural experiment station. Quarterly bulletin. v. 22, no. 4. May 1940. p. 255-258.

Weirs.

Pressure-momentum theory applied to the broad-crested weir: Discussion. By John W. Hackney, Thomas H. Prentice, Boris A. Bakhmeteff, D.D. Curtis, Carl Rohwer, and John Hedberg. American society of civil engineers. Proceedings. v. 66, no. 6, pt. 1. June, 1940. p. 1119-1129.

Welding.

Arc welding economical for implement repairs. By Ed. G. Powers. Farm implement news. v. 61, no. 12. June 13, 1940. p. 34-35.

Welded building construction cost. By Gilbert D. Fish. Engineering news-record. v. 124, no. 25. June 20, 1940. p. 920, 922. Summary: 1. Welding always permits some steel to be saved. 2. Value of steel saved is at least equal to mill price plus freight. 3. In fabricating shops experienced in and favorably disposed toward welding, costs of welding fabrication are about same as or slightly less than costs of riveted work. 4. Field welding, if not overdesigned or awkwardly arranged, can be done with fewer hours of labor than field riveting. 5. Expense of shop and field inspection is greater for welding than for riveting, probably two to one. 6. Any one of numerous steel contractors is willing, barring special circumstances, to quote somewhat lower on welding than on riveting for steel construction of all kinds, provided they are not handicapped by prescribed connection details of uneconomical design. 7. Trend is toward welding but has been retarded by prolonged depression in construction.

Wheels.

Transport wheels for agricultural machines. By Eugene G. McKibben and J. Brownlee Davidson. Agricultural engineering. v. 21, no. 3. March, 1940. p. 95-96. V. Effect of wheel arrangement on rolling resistance.

Transport wheels for agricultural machines. By Eugene G. McKibben and J. Brownlee Davidson. Agricultural engineering. v. 21, no. 4. April, 1940. p. 139-140. VI. Effects of steel wheel rim shape and pneumatic tire tread design on rolling resistance.

Transport wheels for agricultural machines. By Eugene G. McKibben and Dale O. Hull. Agricultural engineering. v. 21, no. 6. June, 1940. p. 231-234. VIII. Soil penetration tests as a means of predicting rolling resistance.

Transport wheels for agricultural machines. By Eugene G. McKibben and J. Brownlee Davidson. Agricultural engineering. v. 21, no. 7. July, 1940. p. 275-276, 280. IX. Effective radius and slippage.

Transport wheels for agricultural machines. By J. Brownlee Davidson and Eugene G. McKibben. Agricultural engineering. v. 21, no. 8. August, 1940. p. 319-321. X. Value and cost of pneumatic tires.

Wood.

Marketing of farm woodland products. By Alan MacLeod and John Chandler. Durham, N.H. 1939. 31 p. New Hampshire agricultural experiment station. Bulletin 318.

Volume tables for some Arkansas hardwoods. Richard D. Stevens. Fayetteville, Ark., 1940. 46 p. Arkansas. Agricultural experiment station, Bulletin no. 396.